ABSTRACT

Indonesia is a country with a majority Muslim population. In the Muslim religion there are several restrictions on consuming food or drink. Khamr is a term for intoxicating drinks in which there are additives that can give a drunken effect to those who consume them. In modern times, khamr drinks are better known as alcoholic drinks. In this modern era, many beverage products contain alcohol in it. To make it easier to know the alcohol content in a drink, a detection system is created that can detect the alcohol content based on the pH value in it. The system will consist of a PH-4502C sensor which is capable of detecting the pH of liquids and then the detected data will be processed by the NodeMCU board to be displayed on the LCD and Blynk. And as a source of power supply it will be used battery. In this study, data were collected 20 times for each test liquid consisting of a pH Buffer solution of 6.86, a pH Buffer solution of 9.18, beer, wine, soju, milk, tea and coffee under the same conditions, namely each liquid was tested at a volume of 250 ml and within one minute for each test. From testing, it was found that the smallest error value was 0.43% and the largest error was 11.73%. Based on the test results, it can be seen that the system created can be said to be good because it has an accuracy value of 95.93% and a system accuracy rate of 99.46%.

Keywords: *alcohol, Blynk, Liquid Crystal Display (LCD), NodeMCU, PH- 4502C.*